Defense Travel System

Overview
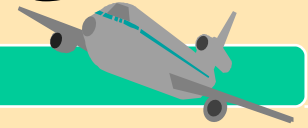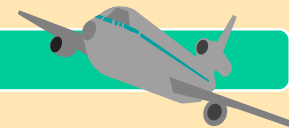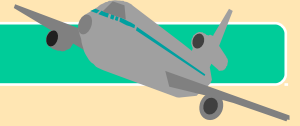
Outline

- ❏ **Background of the Defense Travel System**
- ❏ **Vision of the Defense Travel System**
- ❏ **Benefits of DTS**
- ❏ **System of Firsts**
- ❏ **Defense Travel System Structure**
  - ❐ **Government Functions**
  - ❐ **Commercial Functions**
- ❏ **Training**
- ❏ **Implementation Schedule**
- ❏ **Q/A?**

Background

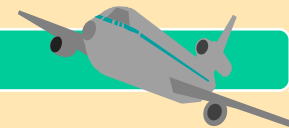✦ **National Performance Review - Sep '93**

    Report called for overhaul of entire DoD travel system.

 DoD Travel Reengineering Task Force - Jan '95

DoD travel system is fragmented, inefficient, expensive to administer, and occasionally impedes mission accomplishment .

Background (con't)

DoD Travel Reengineering Task For Recommendations:

✦ **Consolidate Travel Services under one single procurement entity**

- **Simplify traveler entitlements and publish in *English***
- **Decentralize travel budgets**
- **Make supervisors responsible for managing travel**
- **Use full-service civilian commercial travel contractors to make all arrangements**
- **Use government charge cards**
- **Speed travel voucher settlement**
- **Use electronic funds transfer to speed payment of claims**

The Goal: A fair and equitable temporary duty travel system for all DoD organizations.
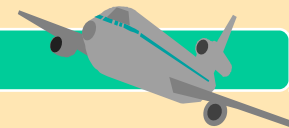
DTS Vision
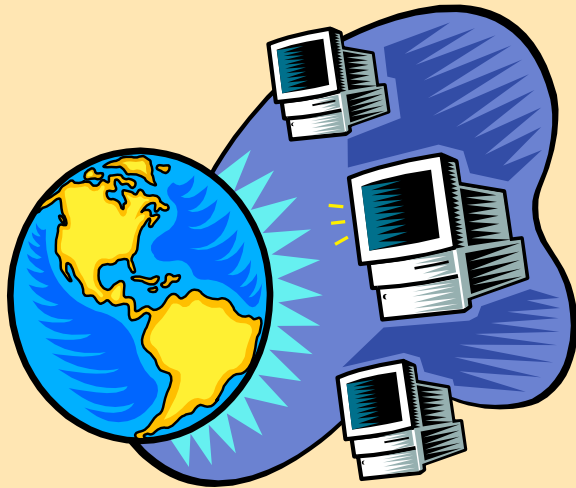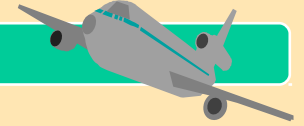
A seamless, paperless, temporary duty travel system that meets the needs of travelers, commanders, and process owners.

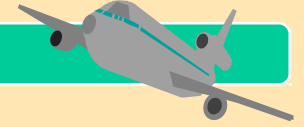It must **reduce costs, support mission requirements,** and provide **superior customer**

Benefits of DTA

- ✦ **Reduced paperwork**
- **Faster payments to travelers**
- **Unified, integrated system for authorization, reservations, payments**
- **Common DoD system**
- **Eventually…**
  - **Cost savings**
  - **Personnel savings**

System of Firsts
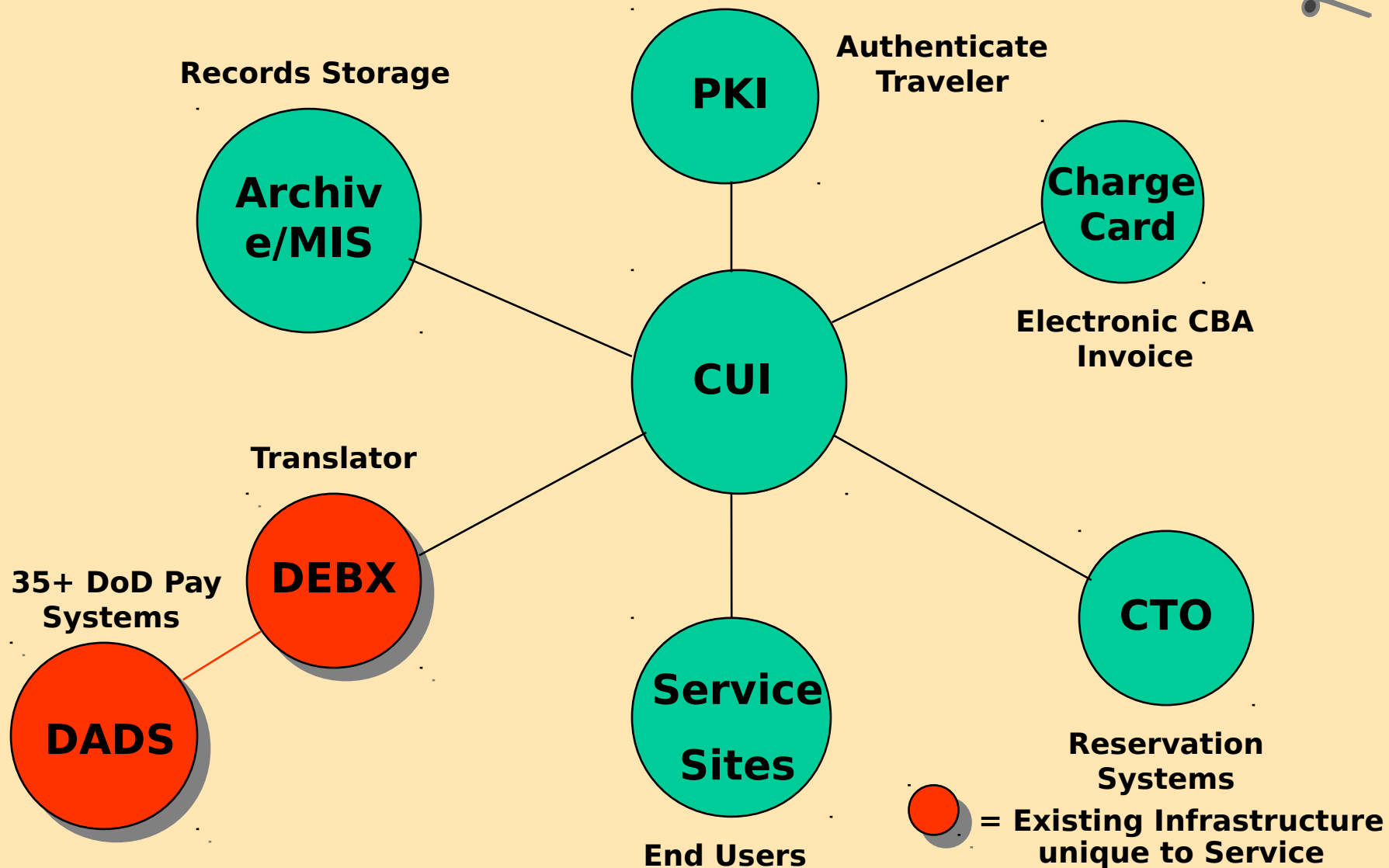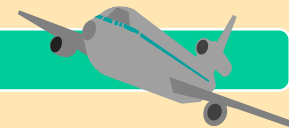
✦ **Lots of Development - policies, procedures & software**

  ⬚ **Automates reengineered travel policies / procedures**

  ⬚ **Electronic Commerce with 35+ DoD financial systems**

  ⬚ **DoD Public Key Infrastructure**

    ⬚ **For DTS initially**

    ⬚ **Now used for all DoD Applications**

  ⬚ **Single Electronic Records Management of all DoD travel data**
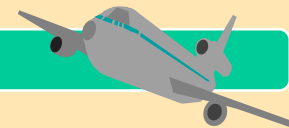
  ⬚ **Interface with industry reservations systems**

Defense Travel System

Records Storage

Authenticate
Traveler

PKI

Archive/MIS

Charge Card

CUI

Electronic CBA
Invoice

Translator

DEBX

35+ DoD Pay
Systems

CTO

Service Sites

DADS

Reservation
Systems

🔴 = Existing Infrastructure
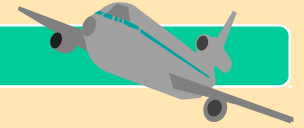unique to Service

End Users

The DoD Travel Process

3 Phases:

✦ **Authorization--Replace paper travel orders**

▢ **Reservation--Desktop access to Travel Agent and Commercial Reservation System**

▢ **Vouchering--EDI to DOD financial systems**

DTS Seamlessly Automates the Process

What Makes DTS Interesting
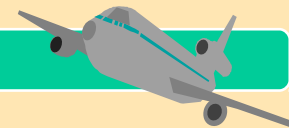
- ✦ **Hardware, software owned by TRW**

- **Government buying:**
  - – **Deployment by the user**
  - – **Training by the class**
  - – **Transactions by the trip**
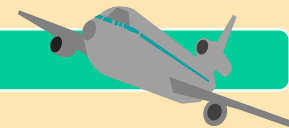- **First major system to use DoD Public Key Infrastructure (PKI) for security**

Global DTS

Traveler

Virtual Private Network

DOD Public Key Infrastructure

Defense Table of Distances

NIPRNET (VPN Tunnel)

TRW Data Center

Base Firewall

Bank of America

Authorizing Official

Commercial Reservation Systems Travel Office

DoD Accounting and Disbursing Systems

MIS/Archive

DoD Electronic Business eXchange

Estimated Net Savings Full Capability (Three years from IOC)

Accounting & Finance Processing $76.3M

Records Management $15.4M

Travel Service Provider $38.9M

Total Savings $130.6M

Net System Cost
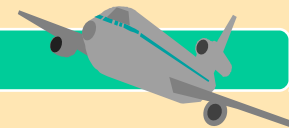
Program Management $5.2M

Transaction Fees $25.8M

Total Costs $31M

Total Net Savings
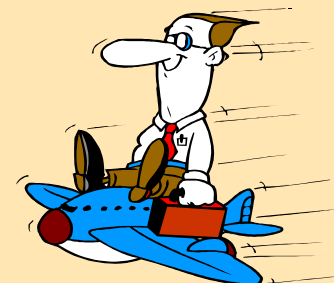$99.6M

DTS Government Components
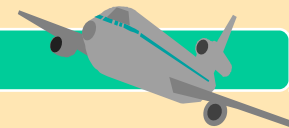
- Traveler
- Authorizing Official (AO)
- Certifying Official (CO)
- Digital Signature/PKI Structure
- Archive "warehouse" (Defense Manpower Data Center)
- Defense Accounting and Disbursing Systems (DADS) (35+)
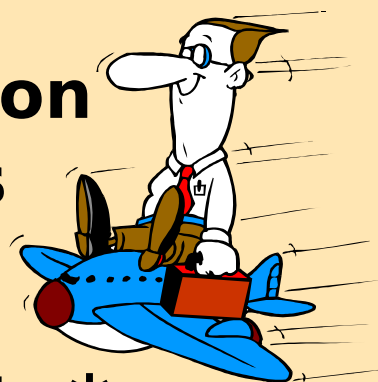- Defense Travel Administration (DTA)

The Travelers

- ✦ **Using Common User Interface:**

  - ✓ **Request travel authorization**
  - ✓ **Make travel arrangements**
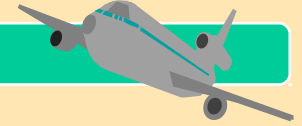 - ✓ **Submit post-travel claims**

  - **Retain required receipts***

*(Authorizing official may be required to review prior to approving claim for processing. Traveler must keep required receipts for 4 years.)
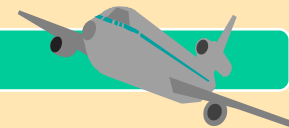
The Authorizing Officials

✦ **Direct/authorize travel**

▯ **Obligate travel funds**

▯ **Approve trip arrangements**
For example:
 ✔ **Mode of transportation**
 ✔ **Lodging selection**
 ✔ **Rental cars**
 ✔ **Trips home**
 ✔ **Phone calls**
 ✔ **Adjusted per diem rates**

Defense Travel Administration

Key Functional Areas

- **Finance**
  - ☛ **Budgets and balances**
  - ☛ **Link budgets with lines of accounting**
  - ☛ **Link budgets with AOs**
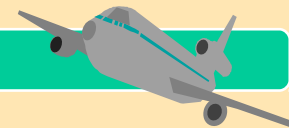 - ☛ **Appointed in writing as an accountable official**

- **Personnel**
  - ☛ **Traveler and AO identification (organizational information)**
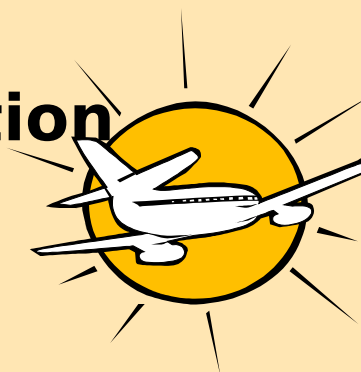 - ☛ **Relationship between AOs and travelers**
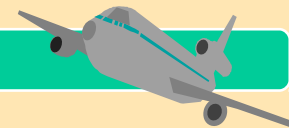
Defense Travel Administration

- **Transportation Officer (TO)**
  - ☞ **Familiar with transportation policies**
  - ☞ **Group/deployment travel**

- **Communications/Information Technology**
  - ☞ **Knowledge of automated systems**
  - ☞ **Public key infrastructure**
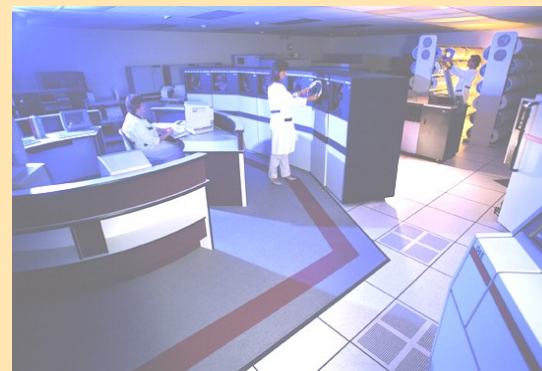 - ☞ **Capability to download data and generate/review reports**

Common User Interface (CUI)
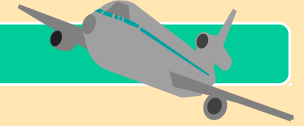
"The heart of the DTS."

- Travel arrangements
- "Should cost"
- Budget management
- Policy checks
- Exceptions to policy
- Voucher completion
- Overdue vouchers
- Maintain travel data
- Split disbursements

- Digital signature
- Interface to DADS
- MIS Interface (DMDC)

DoD Public Key Infrastructure

❑ **Digital signature using public/private key (PKI) cryptography meets United States Code (USC) and Government Accounting Office (GAO) legal requirements for signature on all claims**

❑ **Digital signature provides confidence that:**

- **The person sending the transaction is actually the originator**
- **Document has not been modified**

PKI Key Pairs
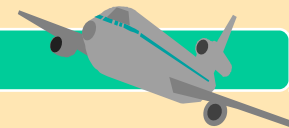
Unique Key Pairs Generated At Same Time
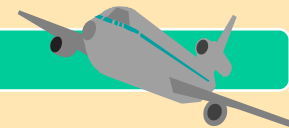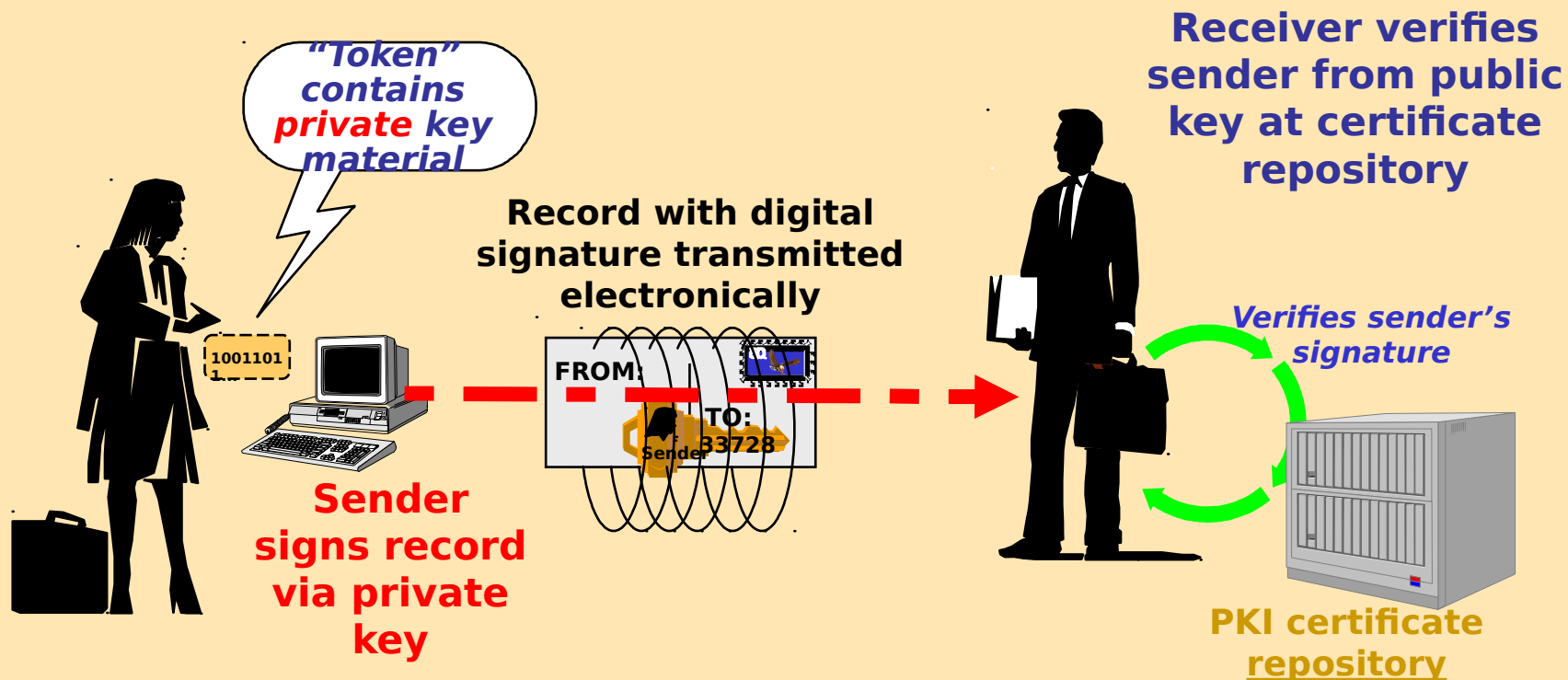
Private Key

PIN 5638

Public Key

12429

Bill

✔ *Kept in owner's possession*
✔ *Password protected*
✔ *Used to sign messages*

✔ *Distributed freely and openly as part of a certificate*
✔ *Used to verify signatures*

How PKI Functions

Digital Signature = Secure Transmission

"Token" contains *private* key material

Record with digital signature transmitted electronically

Receiver verifies sender from public key at certificate repository

1001101 1

FROM:

TO: 33728

Sender

Sender signs record via private key

Verifies sender's signature

PKI certificate repository

PKI Based Identification & Authentication

Remote User

X.509 Infrastructure

LDAP

NIPRNET

DTS CUI

Secure Gateway

(system level access control & auditing)

DTS RDC Servers

(application level access control & auditing)
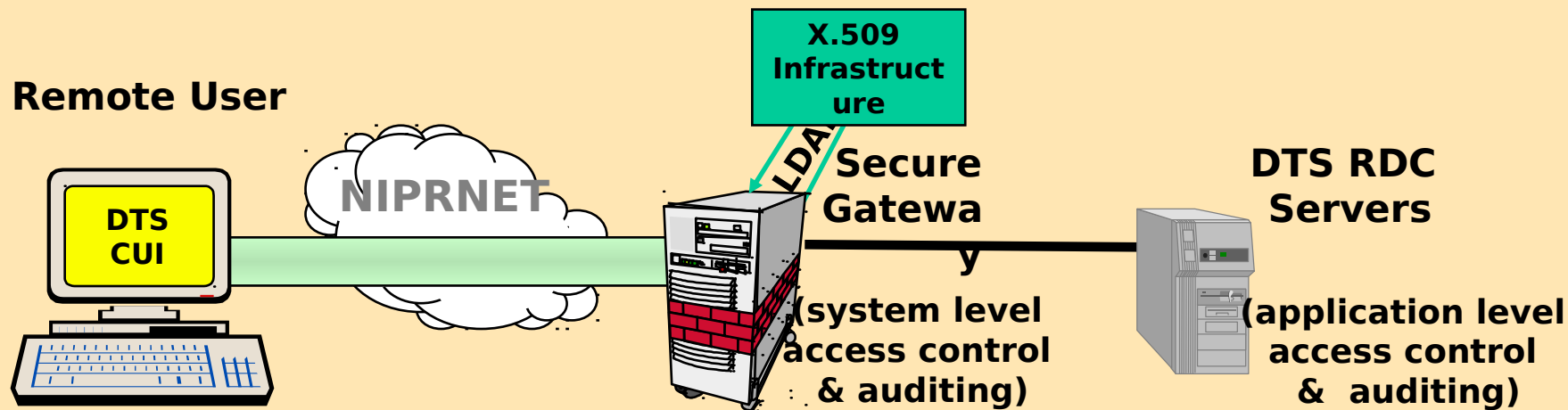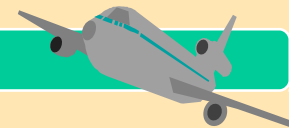
1. User requests access to DTS protected resources
2. Secure Gateway challenges the request
3. User provides digitally signed response
4. Secure Gateway authenticates user and verifies credentials through its interface to the PKI
5. Secure Gateway confirms session, exchanges secret session keys for the client-to-gateway VPN, and establishes connection to protected DTS resources through a single port, encrypted tunnel
6. Application-specific discretionary access controls and permissions mediate user access to data on the back-end data servers
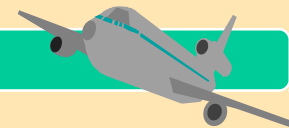
Training For DTS
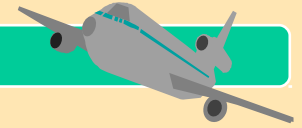
- ✦ **Joint training effort:**
  - ✦ **Government: policies/procedures**
  - ❑ **TRW: System training CUI***
  - ❑ **Services: Train-the-Trainer**
- ✦ **Centralized training locations**
- ❑ **Comprehensive instruction materials**
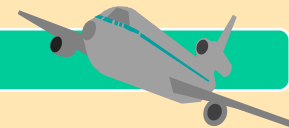
* Common User Interface

Base Implementation Schedule

- [Add your proposed or approved implementation schedule, by squadron]
- [Include training session dates for travelers, AOs, DTAs if known]

Questions?